## **ABSTRACT**

The present invention relates to undifferentiated human embryonic stem

cells, methods of cultivation and propagation, production of differentiated cells and in particular the production of human ES capable of yielding somatic differentiated cells in vitro, as well as committed progenitor cells capable of giving rise to mature somatic cells and uses thereof.

In one aspect of the present invention, there is provided a purified preparation of undifferentiated human embryonic stem cells capable of proliferation in vitro.

In another aspect, there is provided a somatic cell differentiated *in vitro* from an undifferentiated embryonic stem cell. There is also provided a committed progenitor cell capable of giving rise to mature somatic cells.

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